# THE FAMILY-GROUP NAMES BASED ON SELYS' LÉGIONS

## John W. H. Trueman

Research School of Biological Sciences, Australian National University, Canberra, ACT 0200, Australia. (email: trueman@rsbs.anu.edu.au)

Received 22 Februari 1999; revised 20 March 1999; accepted 21 March 1999

#### Abstract

It recently was suggested that family-group names derived from the names of Selys' legions are not valid. I state why I believe this view is mistaken and I argue that, even if it were not, nomenclatural stability in Odonata can be better served by the preservation of these names than by their overturn.

#### Introduction

Bechly (1998:49-50), expressed a view that family-group names derived from Selys' Légions do not satisfy the requirements of the International Code of Zoological Nomenclature (ICZN, 1985). He gave two examples, Euphaeidae and Dicteriadidae (the latter commonly written Dicteriastidae the emendation to Dicteriadidae was suggested by Dunkle, 1991). Both of these family names are currently and generally attributed to Selys (1853). In Bechly's view the correct names are Epallagidae Needham 1903 and Heliocharidae Tillyard & Fraser 1939.

## **Argument**

The modern construction "Euphaeidae" was coined by Jacobson & Bianchi (1905). If, by his use of the term "Légion Euphaea", Selys (1853) did not create a family-level name, this construction becomes a junior synonym of Epallagidae (Needham, 1903). In like manner, Dicteriastidae, coined by Montgomery (1960), becomes a junior synonym of Heliocharitidae (Tillyard & Fraser, 1939).

The correctness or otherwise of Selys' family-group names hinges on whether they satisfy the requirements of the Code of Zoological Nomenclature. Beehly (1998) states "... Selys' 'Légions' are not available as family-group taxa, since they are neither 'nouns in the nominative plural' [Art. 11(f)(i)(1) of the code], nor 'ending in a latinized suffix' [Art. 11(f)(i)(3)."

The relevant Article is 11(f)(i)

A family-group name must, when first published,

(1) be a noun in the nominative plural based on a generic name then used as valid for

- a genus contained in that family-group taxon, ... and
- (2) be clearly used to denote a suprageneric taxon and not merely as a plural noun or adjective referring to the members of a genus, ... and
- (3) end in a latinized suffix except as provided in subsection f(iii).

#### Article 11f(iii) reads:

A family-group name published before 1900 in accordance with the above provisions of this section, but not itself fully latinized, is available with its original author and date, provided it has been latinized by later authors and that it has been generally accepted as valid by authors interested in the group concerned and as dating from that first publication as a vernacular name.

It is convenient to take these requirements in reverse order.

Subclause (3): In 1853 Selys created "Légion Euphaea" and "Légion Dicterias". These are not latinized in that they do not end in the suffix "idae". The suffixes were added later, for Euphaeidae by Jacobson & Bianchi (1905), and for Dicteriastidae by Montgomery (1960). The latter remains attributable to Montgomery notwithstanding the emendation by Dunkle (1991). Each name is widely accepted and in common use. Clearly, in regard to the attachment of a suffix these names are covered by the exception provided for in Article 11f(i)(3). Thus, the second of Bechly's stated grounds for rejecting these names is simply and unequivocally incorrect.

Subclause (2): There is no disagreement about this requirement. From the start, each of Selys' Légions denoted a suprageneric taxon. The Légion Euphaea comprised the genera *Euphaea*, *Anisopleura*, *Bayadera*, and *Dysphaea*. The Légion Dicterias comprised the genera *Dicterias* and *Heliocharis*.

Subclause (1): This clause has two parts, of which the second clearly is satisfied, "Légion Euphaea" and "Légion Dicterias" indeed are based on genus names which then, as now, are used as the valid name for a genus within the supergeneric taxon.

Thus, the only *possible* ground for doubting whether Selys' names conform to the code relates to the first seven words of subclause 11f(i)(1). In a construction of the form "Légion Euphaea", is "Euphaea" a noun in the nominative plural?

It is here that a naive misapplication of latin grammar can readily mislead, for it must be remembered that Selys wrote in French, and in each of his Synopses he purported to create not merely a set of names for the taxonomic level he termed the légion, but an entire nomenclature extending from above the family level to below subgenus. For Selys, the suborder Zygoptera was divided into two huge families, Agrionines and Calopterygines. Within each he created subfamilies (sous-famille), légions, genera (genre), sub-genera (sous-genre) and groups (groupe). Given its position in this hierarchy the modern nomenclatural equivalent of a légion is a tribe, and the corresponding modern ending would be "ini". However, Selys' Légions correspond for the most part to what are now regarded as families or superfamilies.

Throughout his works, the method by which Selys formed new names below subfamily level was remarkable but consistent. He simply used the same spellings everywhere, never changing the ending to denote taxonomic rank. For example, within Calopteryginae, Légion Dicterias contains genre *Dicterias* which contains sous-genre *Dicterias*, and Légion Euphaea contains genre *Euphaea* which contains sous-genre *Euphaea*.

Further, the genre are themselves supra-generic in the sense that Selys almost always included two or more existing genera, adopting the name of one (not always the first published) as the name of the genre and relegating the others to sous-genre level in his system. But he kept the original binomen. For example, the genus (genre) Euphaea contains both *Euphaea variegata* Rambur and *Epallage fatime* Charpentier; the latter is not rendered as *Euphaea fatime* (Charp.).

To a modern systematist this naming system looks somewhat unusual. Certainly, taken at face value it creates several difficulties for anyone attempting to follow the [1985] Code. For example, do *genres* represent genus-level or family-level taxa? I would argue for the latter. This particular doubt does not affect the rank of légion. As a supra-generic grouping, a légion clearly is a family-level category. For our present purpose, the only difficulty is that the Code requires genus-group names to be singular and family-group names plural.

The construction "Légion Euphaea", considered purely as a name in the Latin language, appears at first sight to be singular. This is because, in Latin, "Euphaea" is in the nominative singular case. Of course, if it were not, its use as a genus name would immediately be called into question. In the context of Selys' Synopses, however, it is abundantly clear that the names of the légions are plural. Technically, in terms of the Code, they are vernacular names only available to be treated as family names after having been fully latinized and used by later authors.

The reasoning is simple. As a writer of French, Selys did not handle *any* name in his system, including any genus name, as if it were in Latin. Instead he invariably and consistently treated each name, whatever its original derivation ("Euphaea" is from Latin; "Dicterias" is from Greek), as an indeclinable French noun. The underlying context is that in French, as in English, nouns do not have cases as such, and the ending does not necessarily change with the number. Selys could have chosen to treat some or all names as Latin, in which case he might have formed Latin plurals, e.g., Euphaearum from Euphaea. The fact that he did not, and was entirely consistent in this matter, is clear evidence of his intention to do otherwise. We should note that it was not open to him to use a French form plural, e.g., Euphaeennes, as the name for a légion, because that would have falsely indicated that his légions (tribes) were the equal of his subfamilies. The modern way around this difficulty, the appendation of a second standard plural ending, "ini", was arrived at much later.

Today we must respect Selys' decision to treat all names as French, and not require him *a posteriori* to have regarded them as Latin. We cannot now identify the case from the ending, because that does not change. We *can* readily identify it from the context. It is clear that when we regard Selys' Légion names as French vernacular names they are plural, and therefore properly formed when published. To argue otherwise is to reject these names because the author wrote in French. It follows immediately that Selys' names are available according to the Code.

# **Stability**

Thus, in my view, Bechly (1998) has reasoned incorrectly and his conclusions are wrong. The correct name and attribution for family Euphaeidae is Euphaeidae Selys 1853.

The correct name for family Dicteriastidae is Dicteriastidae Selys 1853, or, if Dunkle (1991) is right (a question I have not addressed and prefer to leave open), the correct name for this family is Dicteriadidae Selys 1853.

However, let us suppose that after further argument I am proved wrong, and Bechly's view prevails. There is a wider issue of nomenclatural stability to consider. For odonatologists to reject these two of Selys' names at this date, after many years' acceptance and use, would perhaps cause only minor confusion. To accept the logical consequence that all of Selys' family-level names, including (arguably) his genre names, are similarly flawed would produce a complete disaster. This prospect recalls the time when Kirby (1890) reassigned the genus name Agrion from narrow-winged coenagrionines (Type Agrion puella = Coenagrion puella) to broad-winged calopterygines (Type Agrion virgo = Calopteryx virgo) on the basis of an obscure and long-forgotten work by Latreille (1810). That reassignment created a major nomenclatural confusion which lasted over forty years (Montgomery, 1954). If Bechly's conclusion were indeed correct, the sensible solution, in my view, would be to approach the International Commission on Zoological Nomenclature with a case to have Selys' names preserved.

## References

- Bechly, G., 1998. New fossil damselflies from Baltic amber, with description of a new species, a redescription of *Litheuphaea carpenteri* Fraser, and a discussion on the phylogeny of Epallagidae (Zygoptera: Caloptera). International Journal of Odonatology 1:33-63.
- Dunkle, S. W., 1991. Review of the neotropical damselfly family Dicteriadidae (new spelling), with an annotated bibliography (Zygoptera). Odonatologica 20:239-244.
- ICZN, 1985, International Code of Zoological Nomenclature, 3rd ed. London. International Trust for Zoological Nomenclature, in association with British Museum (Natural History).
- Jacobson, G. & V. Bianchi, 1905. [Die Orthopteren und Pseudoneuropteren des Russischen Reiches und der angrenzenden Gebiete]. A. F. Dewrien, St. Petersburg. [Odonata chapter pp. 635-952; cited from Bechly, 1998.]
- Kirby, W. F., 1890. A Synonymic Catalogue of Neuroptera Odonata, or Dragonflies. With an appendix of fossil species. London, Gurney & Jackson.
- Latreille, P. A., 1810. Considerations Général sur l'Ordre Naturel des Animaux Composant les Classes des Crustacés, de Arachnides et des Insects avec un Tableau Méthodique de leurs Genres Disposés en Familles. Paris, Schoell.
- Montgomery, B. E., 1954. Nomenclatural confusion in the Odonata; the *Agrion-Calopteryx* problems. Annals of the Entomological. Society of America 47:471-483.
- Montgomery, B. E., 1960. Geographical distribution of the New World calopterygine dragonflies, with notes on their evolutionary position. Proceedings of the XVth International Congress Zoology, London: 1001-1003.
- Needham, J. G., 1903. A genealogical study of dragonfly wing venation. Proceedings of the U. S. National Museum 26: 703-764, pls 31-54.
- Selys-Longchamps, E. de, 1853. Synopsis des caloptérygines. Bulletin de l'Académie Royale de Belgique 20 (Suppl.): 1-73.
- Tillyard, R. J. & F. C. Fraser, 1939. A reclassification of the order Odonata. [part II]. Australian Zoologist 9:195-221.